

# Zack Herrick

herrickz1120@gmail.com • 248.894.8682 • Clawson, MI

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Experience	<b>GENERAL MOTORS</b> <b>Technical Lead - Calibrations</b>	<b>November 2021 - Present</b>
	<ul style="list-style-type: none"><li>• Deliver C++ APIs for application software configuration with <b>100% uptime</b> on device</li><li>• Architected the parallel calibration flashing process to decrease calibration flashing time by 50%, saving \$2.4 million per year in plant build time</li><li>• Pioneered a custom <b>Python</b> testing framework to enhance testing efficiency, enabling QA and developers to write JSON test cases that invoke reusable Python functions</li><li>• Implemented an automation testing <b>CI/CD</b> pipeline that runs integration tests inside of a custom <b>Linux Docker</b> container</li><li>• Innovated by creating a defect bot using <b>Python</b> and <b>GitHub Actions</b>, automating log pruning, duplicate resolution, and issue triaging</li><li>• Automated deployment of configuration updates using <b>Python</b></li></ul>	
	<b>Software Engineer - Calibrations</b>	<b>October 2019 - November 2021</b>
	<ul style="list-style-type: none"><li>• Built C++ services for <b>Android</b> and <b>QNX</b> enabling complex system configuration</li><li>• Created the inter-process communication interface for allowing <b>Native C++</b> and <b>Java Android</b> applications to fetch system configuration data</li><li>• Implemented custom parsing of an A2L grammar using lexing/parsing in <b>Python Lex/YACC</b></li><li>• Wrote C++ services for calibration flashing over OTA/USB/CAN/Ethernet</li></ul>	
	<b>Software Engineer - Energy App</b>	<b>June 2018 - October 2019</b>
	<ul style="list-style-type: none"><li>• Developed the <b>Android</b> electric vehicle Energy App utilizing <b>Java</b></li><li>• Employed <b>Test Driven Development</b> to enhance the app's robustness and quality</li><li>• Created automated functional tests to validate functionality and prevent regressions</li></ul>	
	<b>ALLY FINANCIAL</b> <b>Software Engineer - Auto Finance</b>	<b>June 2017 - June 2018</b>
	<ul style="list-style-type: none"><li>• Rewrote a monolithic Ember.js application into Angular micro-frontend architecture to increase developer productivity and team autonomy</li><li>• Implemented Java Spring microservices allowing for quick development of new features</li></ul>	
Education	<b>MICHIGAN STATE UNIVERSITY</b> <b>College of Engineering</b>	<b>August 2013 - May 2017</b>
	<ul style="list-style-type: none"><li>• Bachelor of Science, Computer Science</li></ul>	
Languages	C++ • Python • Java • Kotlin • TypeScript • JavaScript	
Skills / Frameworks	Git • Android • Linux • Docker • CI/CD • GitHub Actions • Jenkins • PyTest • Test Driven Development • Angular • Django • Django Rest Framework • React • Spring Boot • Agile	